CARIBOU ANNUAL SURVEY AND INVENTORY FEDERAL AID PERFORMANCE REPORT

STATE: Alaska **GRANT AND SEGMENT NR.:** W-27-4
PROJECT NR.: 3.0

WORK LOCATION: Statewide

PROJECT LOCATIONS: Game Management Units 2, 3, and 5

PROJECT TITLE: The Status of Alaska Caribou and Factors Influencing Their Populations.

PERIOD: 1 July 2000–30 June 2001

REPORT DESCRIPTION: This statewide performance report includes the three regions involved in caribou survey and inventory activities. Statewide and regional activities are listed before specific activities by herd and game management unit.

The Status of Alaska Caribou and Factors Influencing Their Populations in Region II

Regionwide Activities

Activity 1: Prepare a draft caribou management report.

Draft caribou management reports were prepared for all Region 2 caribou herds in 2001.

Activity 2: Write an annual survey and inventory performance report.

Activity 3: Provide information to the Board of Game.

The Board of Game addressed numerous proposals regarding caribou in Region 2 during its spring 2001 meeting.

Activity 4: Conduct fall sex and age population composition surveys to determine status, trend, productivity, and mortality of caribou.

Surveys were conducted on all Region 2 herds during this reporting period.

Activity 5: Monitor the caribou harvest through field observations, hunter harvest reports, and contact with hunters.

Activities by Herd and Unit

Northern Alaska Peninsula Herd (Unit 9)

Activity 1: Conduct an aerial postcalving photocensus in cooperation with the FWS.

> Visual estimates of caribou seen on this cooperative survey totaled about 6,000. Photos of larger herds will be counted when they become available.

Activity 2: Monitor the caribou harvest through field observations, hunter harvest reports, and contact with hunters.

> Preliminary results from Tier II subsistence hunt TC505 show a total of 55 caribou killed. Few NAP caribou crossed the Naknek River during the 2000/01 winter, and most of the caribou reported taken by residents of Naknek and King Salmon were probably Mulchatna caribou. The overall low success of permit holders reflects the reduced availability of caribou and the extremely poor winter travel conditions.

Activity 3: Conduct periodic radiotracking surveys.

> Radio tracking flights were conducted on 11-12 October 2000, 9 January 2001, 13-51 April 2001, 3 June 2001, and 25–26 June 2001.

Other activities funded by Federal Aid on this project:
Conduct fall sex/age composition surveys.

> In October 2000 1,083 caribou were classified in Units 9C and 9E, with ratios of 38 bulls and 18 calves per 100 cows.

Southern Alaska Peninsula Herd (Unit 9)

Activity 1: Conduct an aerial postcalving photocensus of the herd.

> Visual estimates from the 25–26 June 2001 post calving count totaled about 2000 caribou. This number will be refined when photos are counted.

Other activities funded by Federal Aid on this project:

Monitor the caribou harvest through field observations, hunter harvest reports, and contact with hunters

> Preliminary results from the 2000/01 general hunt were 45 males and 1 female killed in Unit 9D.

Conduct fall sex/age composition surveys.

In October 2000 982 caribou in Unit 9D were classified with ratios of 42 bulls and 37 calves per 100 cows. On Unimak Island, 406 caribou were classified with ratios of 40 bulls and 21 calves per 100 cows.

Kenai Mountain Herd (Unit 7)

Activity 1: Conduct fall sex and age population composition surveys to determine status, trend, productivity, and mortality of caribou.

On March 31, 2001 a survey was completed to determine minimum herd size in the Kenai Mountains Caribou herd. A total of 378 caribou was found in seven groups, ranging from 2 to 120. These results compare to 290 animals found in March 2000.

Activity 2: Monitor the caribou harvest through field observations, hunter harvest reports, and contact with hunters.

Preliminary harvest reports for fall 2000: 250 permits were issued (each for 1 caribou of either gender) and 22 caribou harvested (15 males and 7 females).

Kenai Lowland Herd (Unit 15A)

Activity 1: Conduct a postcalving aerial sex and age composition survey.

On June 19, 2001 a survey was completed on the Kenai Lowland Caribou herd to determine the minimum herd size. A total of 128 caribou was found comprised of 23 percent (29) calves. Eighteen of the 99 adults were classified as mature bulls by their antler development. Due to a warm and drier than normal spring this herd probably formed its post-calving aggregation earlier than in past years, resulting in a high number of groups located and a lower than expected total number. Three cow-calf groups were found compared to one in past surveys.

Activity 2: Monitor the caribou harvest through field observations, hunter harvest reports, and contact with hunters.

The Kenai Lowlands caribou herd was not hunted during this period.

Killey River Herd (Unit 15B)

Activity 1: In cooperation with FWS, conduct a postcalving aerial sex and age composition survey.

On November 1, 2000 an aerial survey was completed to determine the minimum number of caribou in the Killey River herd. A total of 632 caribou was located.

Activity 2: Monitor the caribou harvest through field observations, hunter harvest reports, and contact with hunters.

There were three permit drawing hunts in the Killey River Caribou during fall 2000.

Hunt 608: 25 permits issued (each for 1 caribou of either gender) and 13 males were harvested. Season was August 10 to September 20.

Hunt 610: 20 permits, each for two females, 3 females taken. Season was August 10 to September 10.

Hunt 612: 20 permits, each for two females, and no caribou were taken. Season was September 15 to October 10.

In March 2001, the Board of Game adopted a Department proposal to eliminate drawing Hunts 610 and 612 and replace them with a registration hunt.

Fox River Herd (Unit 15B)

Activity 1: In cooperation with FWS, conduct a postcalving aerial sex and age composition survey.

On November 1, 2000 a aerial survey was completed to determine the minimum number of caribou in the Fox River herd. A total of 70 caribou was located.

Activity 2: Monitor the caribou harvest through field observations, hunter harvest reports, and contact with hunters.

Hunt 618: Ten permits were issued and 3 males were harvested in fall 2000.

Twin Lakes Herd (Unit 15B)

Activity 1: In cooperation with FWS, conduct a post-calving aerial sex and age composition survey.

On November 1, 2000 a aerial survey was completed to determine the minimum number of caribou in the Twin Lakes herd. A total of 65 caribou was located.

Activity 2: Monitor the caribou harvest through field observations, hunter harvest reports, and contact with hunters.

The Twin Lakes herd was not hunted during this reporting period.

Nelchina Herd (Unit 13)

Activity 1: Conduct a postcalving photocensus to determine herd size.

Estimated herd size on 9 July 2001 was 35,107 caribou.

Activity 2: Conduct sex and age composition surveys in spring and fall to determine bull composition and calf productivity and survival.

Herd composition on 3 October 2000:
25 bulls/100 cows (17%)
20 calves/100 cows (14%)

Herd composition on 10 July 2001:
39 bulls/100 cows (21%)
44 calves/100 cows (24%)

Activity 3: Conduct a Tier II permit subsistence hunt with 2000 permits issued for bulls only. Monitor harvests and close the hunt if the harvest quota of 1000 bulls is met. Contact hunters to assure compliance with hunt regulations.

Preliminary Harvest:
759 successful hunters
754 bulls (99%) 4 cows

Preliminary Hunter Effort:
71 did not report
357 did not hunt
813 hunted unsuccessfully
759 hunted successfully

Activity 4: Replace existing radio collars.

No collars were replaced during this reporting period.

Activity 5: Collar a sample of calves-of-the-year to monitor trends in body condition and productivity.

Productivity of radio collared caribou in 2001 was:
64% for caribou ≥ 6 years of age
88% for caribou 5 years of age
100% for caribou 4 years of age
17% for caribou 3 years of age
0% for caribou ≤ 2 years of age

Activity 6: Weigh neonatal calves to monitor condition at birth as an indicator of overall herd health.

Neonatal calf weights in 2001were:
18.2 lbs. for male calves
17.0 lbs. for female calves

Mulchatna Herd (Units 9A, 9B, 9C, 17 and 19B)

Activity 1: Monitor caribou distribution through relocation of radiocollared caribou.

Radiotracking flights conducted throughout the year. Seasonal distribution determined.

Activity 2: Conduct an aerial postcalving photocensus to estimate population of herd.

A photocensus was not conducted during FY01.

Activity 3: Monitor the caribou harvest through field observations, hunter harvest reports, and contact with hunters.

Reported harvest - 3,160

Activity 4: Conduct fall sex and age population composition surveys to determine status, trend, productivity, and mortality of caribou.

Results:

Cows (%)	Calves (%)	Bulls (%)	Total
2,405 (61.8%)	584 (15.0%)	926 (23.8%)	3,894

Calves/100 Cows	Bulls/100 Cows
24.3	38.5

Nushagak Peninsula Herd (Unit 17A)

Activity 1: In cooperation with FWS, conduct a census and radiotracking surveys

Conducted winter census. Results:1,037 caribou counted.

Activity 2: Develop a draft interagency management plan.

Nushagak Peninsula Caribou Management Plan developed in 1994.

Activity 3: In cooperation with FWS, conduct fall sex and age population composition surveys to determine status, trend, productivity, and mortality of caribou.

Results:

Cows (%)	Calves (%)	Bulls (%)	Total
391 (53%)	147 (20%)	198 (27%)	736

Calves/100 Cows	Bulls/100 Cows
37.6	50.6

Other activities funded by Federal Aid on this project:

None.

Segment Period Project Costs:

Fiscal year	Region			
2000–2001	II	III	V	Total
Planned	154.3			
Actual	152.6			

Submitted by:

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The Status of Alaska Caribou and Factors Influencing Their Populations in Region III

Regionwide Activities

ACTIVITY 1: Write an annual survey and inventory performance report.

Annual performance reports were written for all herds.

ACTIVITY 2: Prepare a draft caribou management report.

Draft management reports were written for all herds.

ACTIVITY 3: Provide information to the Board of Game during the regulatory process.

Information was provided to the Board of Game concerning proposed intensive management objectives.

Activities by Herd and Unit

Chisana Herd (Unit 12)

Activity 1: Revise population objectives.

During 11-12 June 2001, we met with elders from Northway Village and White River First Nation (Yukon, Canada), and staff from Yukon Department of Renewable Resources to discuss a number of wildlife issues including the historical use and importance of the Chisana caribou herd to these villages. This information will be included in the Chisana caribou herd management plan.

Activity 2: Estimate status, trends, and recruitment through aerial surveys.

We conducted 4 radiotracking surveys (October, January, March, and May) monitoring seasonal movements and range use, and mortality. Annual herd mortality was estimated to be 15% (11% for adult cows, 21% for adult bulls, and 38% for calves ≥ 5 months old).

On September 30, we captured and radiocollared eight 5-month-old female calves to increase our sample of radiocollared caribou in the herd and to obtain weights. Chisana calves continue to be the second largest in Alaska, indicating that the herd's summer range is in excellent condition.

Activity 3: Determine pregnancy rate, peak of calving, parturition and calf survival through aerial surveys.

We conducted a herd pregnancy and productivity survey on 29 May 2001 and found that 100% of the radiocollared cows ≥ 4 years old (6/6) and 0% of the 2 year olds were pregnant, but sample sizes are small. Poor flying conditions kept us from obtaining an adequate sample size to determine herd pregnancy and productivity rates.

Activity 4: Conduct a fall sex and age composition count.

We completed a fall sex and age composition survey on 30 September 2000, finding 6 calves/100 cows and 20 bulls/100 cows. The composition sample was 412 caribou, which comprised of about 95% of the herd.

Activity 5: In cooperation with the Yukon Department of Renewable Resources and the National Park Service, continue developing a draft Chisana Caribou.

ADF&G, National Park Service, and Yukon Department of Renewable Resources continued work on developing a Chisana caribou management plan. We held an interagency meeting in Tok in July 1999 and discussed herd trend, management needs and options, and possible research and recovery efforts. A monitoring schedule was designed and implemented. The completed plan will recommend management and harvest strategies for the Chisana Herd that will meet the mandates of all 3 agencies. We were not able to meet the management objective of a completed management plan by January 2000. The management objective was changed to: Develop a management plan that recommends Chisana herd management and harvest strategies by January 2002.

Macomb Caribou Herd (Portions of units 12 and 20D)

Activity 1: Review and revise population objectives.

A Macomb caribou management report was written and management objectives reviewed.

Activity 2: Estimate status, trends, and productivity from aerial surveys.

An aerial survey was flown to estimate herd composition. A sample of 605 caribou resulted in composition estimates of 10.8 calves:100 cows and 45.1 bulls:100 cows.

Activity 3: Conduct a photocensus of the herd to determine population size.

An aerial survey resulted in a population estimate of 605 caribou.

Beaver Mountains, Big River-Farewell, Rainy Pass, Sunshine Mountain and Tonzona Caribou Herds (Units 19A, 19B, 19C, 19D, 21A and 21E)

Activity 1: Review and revise population objectives.

We reviewed population objectives when the management report was written.

Activity 2: Estimate status, trends and distribution of the herds from aerial surveys.

We completed a helicopter composition survey on the Rainy Pass caribou herd and deployed 1 collar on a yearling female in October 2000.

Delta Herd (including the former Yanert Herd) (Unit 20A)

Activity 1: Review and revise population objectives.

We conducted a photocensus of the herd in June (Preliminary 2001 minimum herd size = 2700, declining).

We conducted fall composition surveys in October (2000: 46 bulls:100 cows, 10 large bulls:100 cows, 11 calves:100 cows, n = 1010).

Activity 2: Estimate productivity, status and trend from a summer photocensus, fall sex and age composition counts and annual mortality.

We conducted a photocensus of the herd in June (Preliminary 2001 minimum herd size = 2700, declining).

We monitored effort and the timing and distribution of harvests through drawing permit reports (RY 2000 100 permits, harvest = 24 bulls).

Fortymile Caribou Herd (Units 20B, 20C, 20D, 20E, 25C and adjacent Yukon, Canada)

Activity 1: Review and revise population objectives.

The following herd and harvest management objectives were developed following decisions made by the Alaska Board of Game and recommendations from the 2001-2006 Fortymile Caribou Herd Harvest Plan: 1) Provide conditions for the Fortymile Herd to grow at a moderate annual rate of 5–10% to a minimum herd size of 50,000-100,000 caribou; 2) Manage the herd to sustain an annual harvest of 1,000-15,000 caribou; 3) Maintain an October bull:cow ratio of at least 35:100; 4) Minimize the impact of human activities on caribou habitat by working with land agencies, landowners, and developers to mitigate developments detrimental to Fortymile caribou; 5) Maintain a near-natural fire regime; and 6) Provide for increased caribou hunting, viewing, and other wildlife-related recreation in Alaska and Yukon.

Activity 2: Estimate status, trends and recruitment from aerial surveys.

We monitored herd movements once every 3-7 days during the hunting seasons to aid hunt management.

Activity 3: Conduct a photocensus to determine herd size.

We completed a herd pregnancy rate (90% for cows ≥ 3 years old) survey, estimated annual adult (93%) and calf survival (46%) using radiotelemetry, completed a postcalving

photocensus (photos not yet counted), and conducted a fall sex and age composition survey (calf and bull/100 cow ratios were 27 and 45/100; 19% of the herd sampled).

Activity 4: Write 1-2 articles for the *Comeback Trail*, a newsletter about the Fortymile Caribou Herd.

We produced 1 issue of the Comeback Trail, an information bulletin explaining the status and trend of the Fortymile herd, current management and research programs and results, and hunting and viewing opportunities. We also gave talks about Fortymile caribou management and recovery at the Campbell Creek Science Center in Anchorage, University of Alaska, Fairbanks, via teleconference to Houghton University in New York, and at the Tok Visitor Center.

Activity 5: Attend 1-2 Fortymile Caribou Management Team meetings.

We completed the Fortymile herd management report covering 1 July 1998-30 June 2001.

Other activities funded by Federal Aid on this project:

We administered 4 registration permit hunts covering Unit 20E and portions of Units 20B, 20D, and 25C with the combined quota of 150 bull caribou. All 4 hunts were closed early by emergency order. Annual harvest was 145 bulls and 8 illegal cows.

We developed a Fortymile caribou/moose website that explained management direction, population trends, and hunting regulations.

We attended 2 Fortymile Caribou Management Team (Team), 2 Eastern Interior Regional Council, and 1 Yukon Fish and Wildlife Management Board meetings to report on the progress of the Fortymile herd management program and to draft harvest regulations. The Team meetings were also part of a review process to ensure the Fortymile Caribou Management Plan was being implemented as intended. Team efforts ensured that state and federal regulations were consistent with the Fortymile Caribou Herd Harvest Plan.

As part of the Fortymile Caribou Habitat Subcommittee (part of the Fortymile Caribou Management Team) we met with representatives from the mining industry, US Air Force, and state and federal agencies and developed agreements that ensured adequate habitat protection for the herd. We maintained a web site displaying herd movements that industry uses to plan their daily activities.

Galena Mountain, Ray mountains, and Wolf Mountain Caribou Herds Units 20F, 21C, 21D and 24)

Activity 1: Review and revise population objectives.

We reviewed management objectives when the management report was drafted.

Activity 2: Estimate status, trend and productivity of the herds from photocensus and aerial surveys.

With the cooperation of the BLM, we conducted an aerial survey of the Ray Mountains Herd counting 1,736 caribou.

We conducted an aerial survey of the Galena Mountain Herd and counted 105 caribou.

We conducted an aerial survey of the Wolf Mountain Herd and counted 489 caribou.

Other activities funded by Federal Aid on this project:

We monitored a harvest of 2 caribou from the Galena Mountain Herd, 2 from the Wolf Mountain Herd and 6 from the Ray Mountains Herd.

Porcupine Caribou Herd (Units 25A, 24B, 25D, and 26C)

Activity 1: Review and revise population objectives.

We completed a management report reviewing PCH population status, composition and harvest data.

Activity 2: Estimate status, trend, and productivity from aerial surveys.

We conducted radiotracking and capture activities during February and March with assistance from U.S. Fish and Wildlife Service and Yukon Department of Renewable Resources. Twenty-five caribou were captured and radiocollared in March (20 cows, 5 bulls). We assisted Canadian biologists in capturing an additional 17 caribou (12 cows, 5 bulls). We prepared a paper evaluating the possible causes of the population decline in the PCH, using a population model, and traveled to the 9th International Caribou Workshop to present the results.

Activity 3: Conduct calving ground surveys.

We conducted annual calving ground surveys on June 1-5, 11, and 26 with assistance from the U.S. Fish and Wildlife Service. Seventy radio-collared cows were observed, including 59 (84%) parturient cows. Calf survival during June was 61% (assumes all parturient cows produced a calf). The calf:cow ratio at the end of June was 51:100. Deep snow and a late spring resulted in few caribou reaching the calving ground, and relatively low calf survival.

Activity 4: Conduct a photocensus to determine population size.

We completed aerial photocensus in early July 2001. The photographs have not yet been counted, but the conditions were good and the photocensus should provide an accurate population estimate.

Other activities funded by Federal Aid on this project:

We monitored harvests through analysis of harvest reports and through studies in communities in the range of the Porcupine herd.

White Mountains Caribou Herd (Western half of 25C and small portions of northern 20B and eastern 20F)

Activity 1: Review and revise population objectives.

The management report was written and objectives were reviewed.

Activity 2: Conduct radiotelemetry flights to monitor herd demographics.

We flew 3 telemetry flights to monitor herd distribution.

Activity 3: Conduct fall sex and age composition survey.

We flew a composition survey on 9 September 2000. We classified 399 animals including 32 calves, 238 cows, 51 small bulls, 52 medium bulls and 26 large bulls.

Activity 4: Replace radiocollars as needed to maintain adequate sample size to monitor herd demographics.

We deployed 3 radio collars and currently have 15 active collars on female caribou.

Other activities funded by Federal Aid on this project:

We monitored harvest under permit and general hunts. Total reported harvest included 25 bulls, 18 cows, and 1 of unknown sex.

Central Arctic Caribou Herd (Unit 26B)

Activity 1: Review and revise population objectives.

We prepared management report and reviewed and revised management objectives.

Activity 2: Capture and radiocollar female caribou to maintain an adequate sample size for population monitoring.

No caribou were captured in June 2001 because we already had 100 collars in the herd and decided to put the collars out during the next fiscal year.

Activity 3: Estimate status, trend and productivity from aerial surveys by radiotracking collared females in April, early and late June.

A fall composition count was conducted in October 2000. We classified 3,335 caribou with 23.5 % calves and a bull:cow ratio of 83:100. We completed a winter distribution flight in March 2001 and observed an estimated 12,000 caribou in Chandalar Shelf, Your Ck., Wind River, and the Upper Sagavanirtok River. We estimated parturition rate in early June 2001 at 85% and late June calf:cow ratios at 67% for females >= 3 years old.

Activity 4: Conduct a photocensus in July 2000 or June 2001, depending on the weather, to estimate population size.

We conducted a photocensus in June 2000, and counted 27,128 caribou from photos.

Segment Period Costs:

Expenditure	**Personnel months**	**Personnel costs**	**Operating costs**	*Total*
Planned	24.5	137.9	90.0	227.9
Actual	23.0	135.6	89.2	224.8
Difference	1.5	2.3	0.8	3.1

Explanation:

Actual personnel and operating costs were less than planned because fewer new collars were placed on Chisana and White Mountains Herd caribou.

Submitted by:

Roy A. Nowlin
Management Coordinator

The Status of Alaska Brown Bears and Factors Influencing Their Populations in Region V

PROJECT ACTIVITIES

Regionwide Activities

Activity 1: Prepare a draft caribou management report.

Draft caribou management reports for Kilbuck, Teshekpuk and Western Artic herds were prepared Mar–Aug 2001 and submitted to HQ in early September 2001

Activity 2: Write an annual survey and inventory performance report.

Performance report for Kilbuck, Teshekpuk and Western Artic herds were prepared August 2001 and submitted to HQ early September 2001

Activity 3: Provide information to the Board of Game.

None

Activities by Herd and Unit

Unit 18

ACTIVITY 1: Conduct fall aerial sex and age composition counts.

We conducted a composition survey in October 2000. During the survey we classified 2426 caribou, including 1439 cows, 350 calves, 329 small bulls, 168 medium bulls, and 140 large bulls. The caribou classified were from the Mulchatna Herd (MCH); these data were pooled with other MCH data.

ACTIVITY 2: Conduct spring aerial surveys of the Kilbuck Caribou population (KCH) to assess recruitment and distribution.

We classified 1227 caribou during a spring composition count in the Kilbuck Mountains. This included 1132 bulls, 45 cows, 4 calves, and 46 unknowns during 25.2 hours of flying. The high proportion of bulls suggests that caribou in the Kilbuck Mountains are MCH caribou.

ACTIVITY 3: Monitor the distribution of radiocollared caribou in the Kilbuck Caribou population.

We searched for caribou wearing radiocollars in the Kilbuck Mountains during fall to assist with the fall composition survey. We found several caribou from the MCH. We searched again during the spring and found no radiocollared caribou during 25.2 hours of flying.

ACTIVITY 4: Determine the extent of movement and distribution of the Kilbuck Caribou herd and range overlap with the nearby Mulchatna caribou herd.

No radiocollars deployed on caribou in Unit 18 were found in Unit 18 during the calving period this year, same as the past several years. Nearly all radiocollars were found in Unit 17 among calving MCH caribou. Over 90% of the caribou classified during spring composition counts in the Kilbuck Mountains were bulls and very few calves were found. Since the arrival, and annual departure of MCH caribou, extensive trailing has developed leading out of Unit 18 through the KCH's traditional calving areas. We have seen the number of caribou calving in Unit 18 dwindle to a few scattered individuals ever since. The consistent explanation for these data is that the KCH has joined the MCH.

ACTIVITY 5: Monitor hunting and other mortality factors through harvest reporting, public contacts and field observations.

Harvest information is derived from harvest reports. Unit 18 hunters use these reports so infrequently that the information derived from them is misleading. To improve compliance with the reporting requirement, we initiated an incentive program involving a prize drawing. Preliminary results are encouraging because harvest reporting has improved.

ACTIVITY 6: Continue to improve communication with the public.

We included members of the Qavilnguut (Kilbuck) Caribou Cooperative Management Working Group during a caribou composition flight so they could see that few caribou are still calving in the Kilbuck Mountains and we have maintained informal contact throughout the year.

TESHEKPUK LAKE HERD (UNIT 26A)

ACTIVITY 1: Monitor distribution and movements using satellite collar data, radiotelemetry data and aerial survey observations.

We obtained weekly locations from caribou with satellite collars and plotted them on maps. In a cooperative effort with the North Slope Borough (NSB) and BLM we worked with a consulting company to analyze satellite collar data from the past 10 years. We flew VHF radio telemetry surveys throughout the year to look at movements and distribution throughout the year.

ACTIVITY 2: Monitor hunting and other mortality factors through harvest reporting, public contacts and field observations.

We examined data from harvest surveys that have been done in villages within the range of the TCH, and used the human population to extrapolate the total number of caribou harvested per year in each village We conducted VHF radiotracking surveys and examined satellite collar information to estimate what percentage of the caribou harvested in each village were from the TCH. From this information we calculated that 2503 caribou were harvested from the TH during the reporting period. We did not detect any large natural mortality events during the reporting period

ACTIVITY 3: Collect harvest information through the North Slope Borough and the Subsistence Division.

We reviewed harvest data from the NSB Dept of Wildlife Management and the Department Subsistence Division. We assisted them in trying to determine the relative numbers of caribou from the TCH harvested in each village.

ACTIVITY 4: Develop updated population objectives in cooperation with the public and other agencies.

We discussed population objectives for the TCH at NSB Fish and Game Management Committee meetings.

ACTIVITY 5: Attend meetings with management agencies, oil companies, and caribou users with the intent of minimizing conflicts between the herd and major development projects.

We attended meetings with the BLM Research Monitoring Team for the National Petroleum Reserve, the Subsistence Advisory Panel, the NSB Fish and Game Management Committee, the NSB Planning Department, and with oil companies to minimize the impact of oil exploration and development on the TCH.

ACTIVITY 6: Weigh, measure and collect blood, fecal and hair samples from all captured caribou to gain information about the prevalence of diseases, parasites, contaminants and condition of the animals.

We collected blood, fecal, and hair samples and measured, weighed, and assessed the body condition of all captured caribou. The samples were analyzed to look for disease, contaminants, and parasites in the caribou.

ACTIVITY 7: Conduct sex and age composition surveys during mid-summer to determine relative numbers of bulls, cows and calves.

We conducted summer composition surveys on 10 July 2000 using a Hughes 500 helicopter. We classified 3943 caribou and saw 1858 cows, 908 bulls, and 1177 calves. We counted 63 calves:100 cows and 49 bulls:100 cows.

ACTIVITY 8: Involve students in the capture operations, work with students to track satellite collared caribou movements and lecture to high school and college classes about caribou biology.

We worked with students from Anaktuvuk Pass and Barrow who plotted satellite radiocollared caribou locations throughout the school year. We arranged for students from Anaktuvuk Pass to participate in caribou capture at Onion Portage. We gave lectures to middle school, high school, and college classes on the population dynamics of the TCH.

WESTERN ARCTIC HERD (UNITS 22,23 AND 26A)

ACTIVITY 1: Conduct periodic radiotracking flights to monitor herd distribution in relation to reindeer herds and development projects.

Range wide radio telemetry surveys were conducted during spring (Jan–May) and fall (Aug–Dec). Approximately two thirds of all potentially active radio collared caribou were located during each survey.

ACTIVITY 2: Replace radiocollars to maintain a year-end sample size of at least 100 operational radiocollars on living caribou.

Sixteen conventional radio collars were deployed on caribou (13 cows and 3 bulls). Additionally, 4 satellite collars were deployed on cows.

ACTIVITY 3: Conduct aerial surveys during April and May to assess short yearling recruitment.

Short yearling surveys were conducted during April and May. We observed 19 short yearlings:100 adults.

ACTIVITY 4: Conduct aerial surveys during June to monitor initial calf production and the distribution of calving areas.

We conducted calving surveys during June and observed 66 calves:100 cows. The location of maternal and nonmaternal caribou was farther south than usual during 2001.

ACTIVITY 5: Conduct aerial surveys during October to assess herd composition and retrieve radiocollars on "mortality mode".

Poor weather precluded conducting fall composition surveys.

ACTIVITY 6: Collect approximately 100 blood samples to monitor the incidence of selected diseases and pathogens.

One hundred sixteen blood samples (57 bulls and 59 cows) were collected and analyzed for selected bacteria and viruses. No change in levels of exposure were noted compared to previous years.

ACTIVITY 7: Monitor hunting and other mortality factors through harvest reporting, collection of biological specimens and public contacts.

Harvests were estimated through the statewide caribou harvest ticket system, the registration permit hunt, and through community harvest assessments. Hunters harvested approximately 15,000 caribou.

ACTIVITY 8: Improve compliance with regulations and reporting requirements by regularly communicating changes and requirements to the public.

Caribou management was discussed at Advisory Committee meetings and with the WAH Working Group.

ACTIVITY 9: As part of our method of improving relations with the public, involve students in the Onion Portage collaring activity.

Thirteen students from Anaktuvuk Pass and Ambler participated in the caribou collaring project at Onion Portage during 4 days. Students helped by holding caribou and attaching radio collars.

ACTIVITY 10: Develop updated population objectives in cooperation with the public and other agencies.

A subgroup of the WAH Working Group was formed to revise the 1984 Strategic Management Plan. This group met twice and results were reported to the overall Working Group. This process has not yet been completed.

ACTIVITY 11: Support the Western Arctic Caribou herd Working Group by providing logistic support, key staff, information and appropriate leadership at Working Group meetings that are held twice a calendar year.

This activity was not funded by Federal Aid funds and was inadvertently listed as a Federal Aid activity. State funding and administrative support were provided to Working Group members to attend 2 meetings and several planning meetings.

ACTIVITY 12: Collect harvest data from selected communities within the range of the Western Arctic Caribou Herd using community harvest assessment techniques in coordination with the Division of Subsistence, Alaska Native organizations and other resource agencies.

This activity was not funded by Federal Aid funds and was inadvertently listed as a Federal Aid activity. State funds and administrative support were used to conduct community harvest assessments in 3 communities in Norton Sound and 2 communities on the North Slope. We estimated residents within the range of the WACH harvested about 14,500 caribou.

Other activities funded by Federal Aid on this project:

Teshekpuk Herd

ACTIVITY 1: Capture caribou without the use of drugs and attach radiocollars to maintain approximately 40 operational radiocollars.

We captured 20 caribou north of Teshekpuk Lake from July 8–10, 2000 using a Hughes 500 helicopter with a skid-mounted net gun, and attached 5 PTT's and 12 VHF radiocollars. No drugs were used. and caribou were restrained using blindfolds and hobble ropes. The radiocollars were used to aid in population, productivity, and movement studies.

ACTIVITY 2: Conduct short yearling recruitment aerial surveys during April and May .

Short Yearling counts were flown on 17 and 25 April 2001. We located 15 collared cows, 6 of which had short yearlings at heel (40 short yearlings:100 cows). We also classified 1369 caribou in the areas surrounding the collared animals and counted 1168 adults and 201 short yearlings. This computes to 15% short yearlings or 17 short yearlings:100 adults. Surveys were ended prematurely due to a crash of the survey aircraft.

ACTIVITY 3: Conduct aerial surveys during June to monitor distribution of collared females, calf production and early survival.

Calving surveys were flown on 5, 9, 12, and 16 June. We located 29 collared cows and 16 of these had calves at heel, 4 had soft antlers (nonparturient), and 9 had calves but lost them for 55% calving success . Most of the calves were born after 9 June, which was slightly later than normal Cold temperatures and a late snow melt-off delayed the migration and many of the cows did not arrive at the calving area in early June. Cows that calved in the traditional calving area had much better calving success than ones that calves to the south or west.

Segment Period Statewide Project Costs:

Fiscal year	Region			
2000–2001	II	III	V	Total
Actual	152.6	224.8	233.0	610.4

Statewide Total: $610,400

Submitted by:

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